**FEATURES AND BENEFITS**

Offering 40.0A per contact and 157.0A per PCB inch, Molex’s EXTreme PowerEdge™ low-profile power connector is an excellent choice for applications where space is at a premium and rugged, single-piece mating to a card edge or bus bar is required.

The EXTreme PowerEdge™ Connector incorporates proven Molex design elements of high-performance terminal contacts with redundant interface points for optimum mating of double-sided card edge gold fingers. EXTreme PowerEdge™ is available in power only, signal only, and power/signal combinations for design flexibility.

**Features and Benefits**

- Low-profile design allows high current transfer in narrow spaces
- Mates to a 1.57mm (0.62”) PCB card edge or bus bar
- Rated for current interruption hot-plugging requirements
- Rugged power and signal contacts reduce the potential for stubbing or damage
- 2 isolated power contacts or 8 signal contacts per housing segment
- Available in 2, 3, and 4 segment versions
- Press-fit or solder tail PCB mounting
- End-to-end stackable to accommodate additional circuit counts on card edge

**Reference Information**

Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
TUV: R 72042763
Designed In: Millimeters

**Electrical**

Voltage: 250V max in standard contact loading
(Higher voltages may be accommodated through special contact loading — contact Molex)
Current (at 30°C Temperature rise):
- Power: 40.0A max.
- Signal: 3.0A max.
Contact Resistance (per contact):

<table>
<thead>
<tr>
<th>Initial</th>
<th>End of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (miliohms) — 0.5</td>
<td>0.6 max change</td>
</tr>
<tr>
<td>Signal (miliohms) — 6.24</td>
<td>15 max change</td>
</tr>
</tbody>
</table>

Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 5000 Megohms min.
Current interruption:
- Power: 40.0A and 50V DC

**Mechanical**

Mating Force (max per contact):
- Power Contacts — 8.87N (2.0 lb)
- Signal Contacts — 1.4N (0.31 lb)
Un-mating Force (max per circuit):
- Power Contacts — 4.4N (1.0 lb)
- Signal Contacts — 0.14N (0.031 lb)
Durability: 50 cycles

**Physical**

Housing: LCP
Contact:
- Power Contacts - Copper Alloy
- Signal Contacts — Copper Alloy
Plating:
- Contact Area — Select Gold
- Solder Tail Area — Tin
- Underplating — Nickel
Flammability Rating: UL 94V-0

**Documents**

Sales Drawings: SD-45714-XXXX, SD-45719-XXXX,
SD-45844-XXXX, SD-45845-XXXX, SD-45911-XXXX,
SD-45912-XXXX
Product Specs: PS-45719-001

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**Top View of Mixed Power/Signal Connector**

**Power & Signal PCB Application**

**Bus Bar Application**
**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Connector Series Description</th>
<th>Press-Fit Series*</th>
<th>Solder Tail Series*</th>
<th>Number of Segments</th>
<th>Number of Contacts per Segment</th>
<th>Solder Tail Pin Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power only</td>
<td>45714</td>
<td>45719</td>
<td>2 to 4</td>
<td>2</td>
<td>3.19 and 4.33mm</td>
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<tr>
<td>Signal only</td>
<td>45845</td>
<td>45844</td>
<td>2 to 4</td>
<td>8</td>
<td>3.19 and 4.33mm</td>
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<tr>
<td>Power and Signal</td>
<td>45912</td>
<td>45911</td>
<td>2 to 4</td>
<td>2 Power or 8 Signal</td>
<td>3.19 and 4.33mm</td>
</tr>
</tbody>
</table>

*Complete part numbers can be found at [www.molex.com/link/ext-power.html](http://www.molex.com/link/ext-power.html)

![EXTREME POWEREDGE™, DUAL SIDED](image1)

**EXTREME POWEREDGE™, DUAL SIDED**

**T-Rise Current Chart**

![EXTREME POWEREDGE™ CONNECTOR SYSTEM, DURABILITY](image2)

**EXTREME POWEREDGE™ CONNECTOR SYSTEM, DURABILITY**

![Change in Resistance (DmV)](image3)
EXTreme Power® Products

The need for high-current power interconnect solutions in increasingly smaller space continues to rise rapidly. Solving this power equation on new architectures and system platforms has been a major focus for Molex product development teams. The new Molex EXTreme Power® family of products is the direct result of listening intently to our customers' electrical and mechanical design challenges. Since no two applications are the same, the Molex EXTreme Power® offering is comprised of several product families that cover a wide range of current densities, mechanical envelopes, mating terminations and configuration choices that give system designers the ability to maximize their power interconnect needs.